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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,427	07/09/2001	Kevin James Curie	24180-124004	8562

7590      12/19/2005

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EXAMINER
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DYE, RENA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/901,427

Applicant(s)

CURIE ET AL.

Examiner

Rena L. Dye

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/9/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-3,5-19 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-19,21-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-15, 17-19, and 21-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilpers et al. (H1419) in view of WO 97/47468.

Wilpers et al. teaches that it is an object of his invention to provide polymeric compositions having and exhibit improved bonding to other incompatible polymeric material, particularly to polar material. It is a further object to provide a simple and economical method of bonding incompatible polymeric materials, but further providing a polymeric composition comprising functionalized high melt flow polyolefin (adhesive) and unfunctionalized polyolefin. This composition exhibits improved adhesion to polar materials. Functionalization is accomplished by reacting with a carboxylic acid anhydride, which can be exemplified by maleic anhydride, and is the preferred functional group (column 1, lines 39-55; column 2, lines 47-51). Example 1 illustrates a composition including an unmodified polypropylene with a modified polybutylene (Example 1). The compounds have numerous uses in producing films, molded parts, cups, trays and containers. Improved adhesion is exhibited, especially towards polar substrates, such as EVOH copolymer and polyamides (nylons) (column 2, lines 52-59). \*In claim 3, Wilpers et al. specifically recites a polymer composition having and exhibiting

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improved bonding and printability comprising functionalized polyolefins having a melt flow of up to 1500 g/min., and unfunctionalized polyolefins.

Since Wilpers et al. specifically teaches containers, and it is well known in the art to biaxially stretch containers during the molding process to provide strength, it would have been obvious to one having ordinary skill in the art to have biaxially stretched the container taught by Wilpers et al.

Further, as broadly as the invention is recited, the claims would include the blend taught by Wilpers et al. which includes an unmodified polypropylene with a modified polybutylene directly bonded to the EVOH/nylon layer. The teaching of unfunctionalized polyolefins having a melt flow of up to 1500 g/min would have included functionalized polypropylene as disclosed in the present patent application.

Wilpers does not specifically teach the claimed amount of maleic anhydride. WO 97/47468 teaches a laminate material used in making lightweight structural parts, comprised of a multilayered film of a polyamide layer and polyolefin layers bonded to either side of the polyamide layer, wherein the polyolefin layer comprises a blend of at least one olefin polymer and an adhesive, which adhesive comprises at least one polyolefin having at least one functional moiety of an unsaturated carboxylic acid or anhydride thereof (page 4, first full para.). The polyolefins used can include polymers such as polypropylene and polybutylene (page 9, lines 10-17). Suitable adhesives include modified polyolefin compositions composed of a polyolefin having at least one functional moiety such as maleic anhydride. The modified polyolefin composition comprises from about 0.001 to about 10 weight percent of the functional moiety.

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Since WO 97/47468 teaches a similar laminate structure to that of Wilpers, it would have been obvious to one having ordinary skill in the art to have used the amount taught by WO 97/47468 in making the container of Wilpers to have provided adequate adhesion between layers. In view of the teachings or the applied prior art, it is the Examiner's position that the combination of art would have rendered obvious a biaxially stretched container having the recited layers and further inherently possessing a haze value of less than 29% measured through a section of the container having a total thickness of greater than approx. 15 mils.

3. Claims 16 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilpers in view of WO 97/47468 as applied to claims 1-3, 5-15, 17-19, and 21-31 above, and further in view of Speer et al. (US 5,529,833).

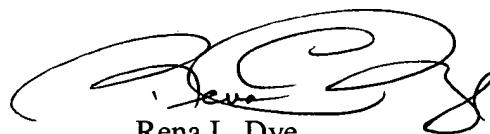
Wilpers et al. and WO 97/47468 have been previously discussed above. The combination of references fails to specifically teach the second layer comprising cobalt.

Speer teaches multilayered structures for packaging foods using oxygen scavengers such as cobalt. In multilayered articles the oxygen scavenging layer may be included with layers such as barrier layers, including EVOH or polyamides (abstract; column 7, lines 11-22).

It would have been obvious to one having ordinary skill in the art to have provided an oxygen scavenger, such as a cobalt catalyst, within the barrier layer of Wilpers et al., since Wilpers et al. teaches the making of cups, trays or containers, which is well known packaging structures. The cobalt catalyst would provide the added benefit of providing additional oxygen barrier property to enclosed food contents.

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Any inquiry concerning this communication should be directed to Rena L. Dye whose telephone number 571-272-3186.

A handwritten signature in black ink, appearing to read 'Rena L. Dye', with a large, stylized flourish extending from the end of the signature.

Rena L. Dye  
SPE, Art Unit 1774

12/12/05

R. Dye  
12/12/05